Listing of the Claims:

Upon entry of the present Supplemental Amendment, the claims will be pending as follows:

1. (Currently Amended) An *in vitro* method for determining the effect of an agent on cell proliferation ~~using cells containing a *Renilla* luciferase polypeptide or a polynucleotide encoding a Renilla luciferase~~, comprising:

a) contacting cells transfected with a polynucleotide encoding a *Renilla* luciferase with an agent suspected of modulating cell proliferation;

b) lysing the cells that have been contacted with ~~an~~ the agent ~~suspected of modulating cell proliferation~~ to form a lysate; and

c) comparing the light emission data from the lysate in the presence of the agent to the light emission data from the lysate in the absence of the agent, wherein a difference in light emission data is indicative of an effect on cell proliferation.

2. (Original) The method of claim 1, wherein the cell is a prokaryotic cell.

3. (Original) The method of claim 1, wherein the cell is a eukaryotic cell.

4. (Original) The method of claim 3, wherein the eukaryotic cell is a mammalian cell.

5. (Original) The method of claim 4, wherein the mammalian cell is a human cell.

6. (Original) The method of claim 1, wherein the cell is a cancer cell.

7. (Original) The method of claim 1, wherein the cell contains a transgene encoding *Renilla* luciferase.

8. (Original) The method of claim 7, wherein the cell is a HeLa cell.

9. (Original) The method of claim 1, wherein the agent is selected from the group consisting of a peptide, a protein, a chemical, a nucleic acid sequence, a small molecule, and a biological agent.

10. (Original) The method of claim 9, wherein the chemical is a drug.

11. (Original) The method of claim 10, wherein the drug is an antibiotic.

12. (Original) The method of claim 10, wherein the drug is a chemotherapeutic drug.

13. (Original) The method of claim 1, wherein the cell is obtained from a subject.

14. (Original) The method of claim 13, wherein the subject is a mammal.

15. (Original) The method of claim 14, wherein the mammal is a human.

16. (Original) The method of claim 1, wherein the modulation is inhibition of cell proliferation.

17. (Original) The method of claim 1, wherein the modulation is stimulation of cell proliferation.

18. (Currently Amended) An *in vitro* method for determining cell proliferation of a cell or population of cells comprising:

a) lysing cells ~~containing a *Renilla* luciferase polypeptide or~~ transfected with a polynucleotide encoding a *Renilla* luciferase to form a lysate; and

b) obtaining light emission data from the lysate *in vitro* over a period of time wherein a change in light emission data is indicative of a change in cell proliferation.

19. (Original) The method of claim 18, wherein the cell is a prokaryotic cell.

20. (Original) The method of claim 18, wherein the cell is a eukaryotic cell.

21. (Original) The method of claim 20, wherein the eukaryotic cell is a mammalian cell.

22. (Original) The method of claim 21, wherein the mammalian cell is a human cell.

23. (Original) The method of claim 18, wherein the cell is a cancer cell.

24. (Original) The method of claim 18, wherein the cell is in a culture of cells.

25. (Original) The method of claim 18, wherein the cell contains a transgene encoding *Renilla* luciferase.

26. (Original) The method of claim 25, wherein the cell is a HeLa cell.

27. (Original) The method of claim 18, wherein the cell is obtained from a subject.

28. (Original) The method of claim 27, wherein the subject is a mammal.

29. (Original) The method of claim 28, wherein the mammal is a human.

31. (Currently Amended) An *in vitro* method for determining the effect of an agent on cell proliferation, the method comprising:

a) transfecting a cell obtained from a sample with a vector containing a polynucleotide sequence encoding a *Renilla* luciferase;

b) contacting the transfected cell with an agent suspected of modulating cell proliferation;

c) lysing the transfected cells that have been contacted with ~~an~~ the agent ~~suspected of modulating cell proliferation~~ to form a lysate; and

d) comparing the light emission data from the lysate in the presence of the agent to the light emission data from the lysate in the absence of the agent, wherein a difference in light emission data is indicative of an effect on cell proliferation.

32. (Original) The method of claim 31, wherein the cell is a prokaryotic cell.

33. (Original) The method of claim 31, wherein the cell is a eukaryotic cell.

34. (Original) The method of claim 33, wherein the eukaryotic cell is a mammalian cell.

35. (Original) The method of claim 34, wherein the mammalian cell is a human cell.

36. (Original) The method of claim 31, wherein the cell is a cancer cell.

37. (Original) The method of claim 31, wherein the sample is obtained from a subject.

38. (Original) The method of claim 37, wherein the subject is a mammal.

39. (Original) The method of claim 38, wherein the mammal is a human.

40. (Original) The method of claim 31, wherein the sample is a biological sample.

41. (Original) The method of claim 40, wherein the biological sample is selected from the group consisting of a blood sample, a urine sample, a stool sample, and a tissue sample.

42. (Original) The method of claim 31, wherein the agent is selected from the group consisting of a peptide, a protein, a chemical, a nucleic acid sequence, a small molecule and a biological agent.

43. (Original) The method of claim 42, wherein the chemical is a drug.

44. (Original) The method of claim 43, wherein the drug is an antibiotic.

45. (Original) The method of claim 43, wherein the drug is a chemotherapeutic drug.

46. (Original) The method of claim 31, wherein the modulating is inhibition of cell proliferation.

47. (Original) The method of claim 31, wherein the modulating is stimulation of cell proliferation.

48-62. (Cancelled)

63. (Currently Amended) An *in vitro* method of screening mammalian cells ~~containing a *Renilla* luciferase polypeptide or a polynucleotide encoding a *Renilla* luciferase~~ to determine their susceptibility to treatment with an agent, comprising:

a) contacting cells transfected with a polynucleotide encoding a *Renilla* luciferase with an agent suspected of modulating cell proliferation;

b) lysing the cells that have been contacted with ~~an~~ the agent ~~suspected of modulating cell proliferation~~ to form a lysate; and

c) measuring light emissions from the cells in the presence and absence of the agent, wherein a difference in light emissions is indicative of the cells' susceptibility to treatment with the agent.

64. (Original) The method of claim 63, wherein the cells are obtained from a subject.

65. (Original) The method of claim 64, wherein the subject is a human.

66. (Original) The method of claim 63, wherein the agent is selected from the group consisting of a peptide, a protein, a chemical, a nucleic acid sequence, a small molecule, and a biological agent.

67. (Original) The method of claim 63, wherein the agent is a drug.

68. (Original) The method of claim 67, wherein the agent is an antibiotic or a chemotherapeutic agent.

69-70. (Cancelled)

71. (Previously added) The method of claim 1, wherein the lysing is performed prior to comparison of the light emission data.

72. (Previously added) The method of claim 31, wherein the lysing is performed prior to comparison of the light emission data.

73. (Previously added) The method of claim 63, wherein the lysing is performed prior to comparison of the light emission data.